Bellcore

Bellcore Practice
BR 790-100-656
Issue 2, December 1988

DC Distribution

- *Electronic Noise Immunity.*

  If the supply power contains more noise than 55 dBrnC the equipment may perform improperly. (See Section 13 of TR-TSY-000064, *LATA Switching Systems Generic Requirements [LSSGR]* or TR-TSY-000513, *Power.*)

Current loads are determined by the appropriate summing of equipment assembly List 1, 2, and 3 drains. The summing procedures are specified in the dc power information supplied by the equipment vendor. Drain definitions, derivations and uses are as follows:

List 1 – These drains are used to size batteries and rectifiers. These drains represent the average busy-hour current at normal operating voltages.

List 2 – These drains are used to size feeder cables and fuses. These drains represent the peak current for a circuit or a group of circuits under worst case operating conditions. For example, a constant power load requires maximum current at minimum operating voltage. List 2 current may also be generated by circuit operating variability (traffic, test condition, etc.) while at normal float voltage.

List 3 – These drains are used to size converter plants. Like List 2 drains, these drains represent peak current, but unlike List 2 drains, they are at a regulated operating voltage provided by converter plants. Note that List 3 drains are essentially List 1 drains for those loads with no circuit operating variability.

If List 3 drains are not available, use List 2 for those loads with no circuit operating variability.

Current drains are initially calculated or measured in the laboratory by the development engineers of the associated equipment vendor. Drain figures for various equipment are available from the CSEWB. This information is available via computer terminal or paper copies. Other sources for this information include equipment engineers as well as equipment vendors. As new telecommunications systems are installed in the field, drain measurements should be made to confirm or update these drain figures. Generally, only field experience can yield accurate drain information.